

REMARKS

Claims 6, 7, and 18-20 have been withdrawn from consideration. Claim 1 is herewith amended. Claims presently active are claims 1 to 5, 8 to 17, and 21.

The Examiner's comments together with the cited references have been carefully studied. Favorable reconsideration in view of the foregoing amendments and following remarks is respectfully requested.

Claims 1-5, 8-12, and 14-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Winston in view of Nishimoto. The Examiner contends that "...it would have been obvious to one having ordinary skill in the abrading arts to substitute the sodium bicarbonate media used by Winston, with the blast media used by Nishimoto containing a polymeric core and a inorganic shell, since Nishimoto teaches that such is desirable for preventing residue buildup during production."

The rejection is respectfully traversed. There is no teaching to use Nishimoto's core-shell particles in a blasting process such as used in the present invention or as used in Winston. Nishimoto is directed to the chemical mechanical polishing of semi-conductor devices which uses a pad to rub the surface being polished. Clearly, this is not the same as blasting the surface with a fluid containing the abrasive. Furthermore, Nishimoto teaches relatively small particles. See [0087] to [0099] of Nishimoto where the largest size mentioned is 20 μm . Moreover, Nishimoto, in the actual examples, utilizes particles having a size of less than 1 μm . Finally, Nishimoto claims a particle size of 0.05 to 0.5 μm . In contrast, Applicants, in the present examples, used particles that were about 500 μm in size.

The claims have been further amended to distinguish Applicants' invention from the prior art. Claim 1 has been amended to recite that the method comprises employing propelling means to propel the particulate media, wherein said propelling means produces an output pressure for media flow of at least 40 pounds per square inch. Support for this amendment is to be found on page 12, lines 10 and 29. Claim 1 has also been amended to recite that the particulate media comprises particles that are 30 to 2,000 μm in size. Support for this amendment is to be found on page 10, lines 5-7.

In view thereof, it follows that the subject matter of the claims would not have been obvious over Winston in view of Nishimoto at the time the invention was made.

Claim 13 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Winston, as applied to claims 1-5, 8-12, and 14-16 above, and further in view of Woodson.

The Examiner contends that "...it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Winston and included a pressurized inert gas such as nitrogen, since Woodson teaches that such may be a desirable modification for reducing the moisture content of the compressed air."

This rejection is traversed. Regarding Woodson's use of nitrogen, there is no mention in Woodson of core-shell particles. In view thereof, it follows that the subject matter of the claims would not have been obvious over Winston further in view of Woodson at the time the invention was made.

Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Winston as applied to claims 1-5, 8-12, and 14-16 above, and further in view of Tsai. The Examiner contends that "...it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Winston and included inorganic materials containing colloidal silica, since Tsai teaches in column 4 that the magnetic properties of colloidal silica make it useful for increasing polishing rates."

Tsai teaches chemical mechanical polishing with colloidal silica, and there is no mention in Tsai of core-shell particles or of blasting particles against an external surface. In view thereof, it follows that the subject matter of the claims would not have been obvious over Winston in view of Tsai at the time the invention was made.

Applicants have reviewed the prior art made of record and believe that singly or in any suitable combination, they do not render Applicants' claimed invention unpatentable.

It is believed that the foregoing is a complete response to the Office Action and that the claims are in condition for allowance. Favorable reconsideration and early passage to issue is therefore earnestly solicited.

Respectfully submitted,



Chris P. Konkol
Attorney for Applicant(s)
Registration No. 34,117

CPK:clb
Rochester, NY 14650
Telephone: (585) 722-0452
Facsimile: (585) 477-1148